

Please amend the claims to read as follows:

D 1 1. (twice amended) An apparatus for controlling the power at the output of an internal combustion engine coupled to a continuously variable transmission, comprising:

- (a) an electric motor coupled to the output of said engine; and
- (b) a motor controller configured to operate said motor simultaneously with said engine and apply positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line;
- (c) wherein, at any given vehicle speed, said motor controller and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

D 2 9. (three times amended) An apparatus for controlling the power at the output of an internal combustion engine coupled to a continuously variable transmission wherein the rate of change of ratio of said transmission is controllable, comprising:

- (a) an electric motor positioned between said engine and said transmission; and
- (b) a controller configured to vary the rate of change of the ratio of said transmission and to operate said motor simultaneously with said engine and apply positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line;

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(c) wherein, at any given vehicle speed, said motor controller and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

D3

12. (twice amended) An apparatus for controlling the power at the output of an internal combustion engine coupled to a continuously variable transmission, comprising:

- (a) a generator coupled to the output of said engine; and
- (b) a generator controller configured to operate said generator simultaneously with said engine and apply positive or negative generator torque to said engine output to maintain engine power output substantially along a predetermined operating line;
- (c) wherein, at any given vehicle speed, said generator controller and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

D4

19. (three times amended) A control apparatus for an internal combustion engine driving a continuously variable transmission and a driveshaft coupled to said continuously variable transmission wherein the rate of change of ratio of said continuously variable transmission is controllable, comprising:

- (a) a generator/motor mechanically coupled to and driven by said engine;
- (b) a generator/motor controller electrically connected to said generator/motor;
- (c) a motor/generator mechanically coupled to said drive shaft;

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(d) a motor/generator controller electrically connected to said motor/generator;

([d]e) a battery electrically connected to said generator/motor controller and said motor/generator controller;

([e]f) said generator/motor, said generator/motor controller, said motor/generator, said motor/generator controller, and said battery comprising said continuously variable transmission; and

([f]g) a controller configured to vary the rate of change of the ratio of said continuously variable transmission and to operate said generator/motor simultaneously with said engine and apply positive or negative generator/motor torque to said engine output to maintain engine power output substantially along a predetermined operating line;

(h) wherein, at any given vehicle speed, said motor controller and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

20. (three times amended) A control apparatus for a vehicle having an internal combustion engine driving a continuously variable transmission, wherein said continuously variable transmission has an output driving a first wheel at a first end of said vehicle wheel, and wherein the rate of change of ratio of said continuously variable transmission is controllable, comprising:

- (a) an electric motor driving a second wheel at a second end of said vehicle;
- (b) a motor controller electrically connected to said motor;

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- (c) said motor coupled to said transmission through a road surface; and
- (d) control means for varying the rate of change of the ratio of said continuously variable transmission and for operating said motor simultaneously with said engine to apply positive or negative generator/motor torque to said engine output to maintain engine power output substantially along a predetermined operating line;
- (e) wherein, at any given vehicle speed, said control means and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

21. (three times amended) A control apparatus for a vehicle having an internal combustion engine, an electric motor coupled to said engine and driving a continuously variable transmission, and a battery system powering the electric motor, comprising:

a motor controller electrically connected to said electric motor;

wherein said motor controller is configured to operate said motor simultaneously with said engine and apply positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line;

wherein said predetermined operating line comprises an ideal operating line as determined by empirical testing of the electric motor and battery system;

wherein, at any given vehicle speed, said motor controller and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

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22. (three times amended) A control apparatus for a vehicle having an internal combustion engine and an electric motor, wherein said internal combustion engine and said electric motor are coupled to a continuously variable transmission, and wherein the rate of change of ratio of said continuously variable transmission is controllable, comprising:

- (a) an engine controller mechanically connected to said internal combustion engine;
- (b) a motor controller electrically connected to said electric motor; and
- (c) control means associated with said engine controller and said motor controller for varying rate of change of the ratio of said transmission and for operating said motor simultaneously with said engine to apply positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line
- (d) wherein, at any given vehicle speed, said control means and said continuously variable transmission can vary engine speed and power, and thus acceleration or deceleration of said vehicle, without changing vehicle speed.

Please add the following new claims:

D5

23. An apparatus for controlling the power at the output of an internal combustion engine coupled to a continuously variable transmission, comprising:
 - (a) an electric motor coupled to the output of said engine; and
 - (b) means for operating said motor simultaneously with said engine and applying positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line wherein, at any given vehicle speed, engine speed and power, and thus acceleration or deceleration of said vehicle, can be varied without changing vehicle speed.
24. In a hybrid electric vehicle having the output of an internal combustion engine coupled to a continuously variable transmission, the improvement comprising:
 - (a) an electric motor coupled to the output of said engine; and
 - (b) means for operating said motor simultaneously with said engine and applying positive or negative motor torque to said engine output to maintain engine power output substantially along a predetermined operating line, wherein, at any given vehicle speed, engine speed and power, and thus acceleration or deceleration of said vehicle, can be varied without changing vehicle speed.